

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARK J. CHAMBERS,
SCOTT A. KAYLOR, JOSE O. PEREZ
and ALAN I. CHAIKEN

Appeal No. 2005-1869
Application No. 09/902,051

HEARD: OCTOBER 18, 2005

MAILED

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U.S. PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before KRASS, RUGGIERO, and NAPPI, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-10.

The invention is directed to an offset correction circuit for correcting DC offset in accordance with a data rate.

Representative independent claim 1 is reproduced as follows:

1. An offset correction circuit to correct DC offset in accordance with a data rate comprising:
a detection circuit to detect a thermal asperity signal; and
a filter circuit to respond to said thermal asperity signal in accordance with said data rate.

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The examiner relies on the following reference:

Patti et al. (Patti) 6,359,743 Mar. 19, 2002
(filed Nov. 20, 1998)

Claims 1-10 stand rejected under 35 U.S.C. §102 (e) as anticipated by Patti.

Reference is made to the brief and answer for the respective positions of appellant and the examiner.

OPINION

The examiner asserts that Patti discloses an offset correction circuit to correct DC offset (identifying Figure 3, element 102, and stating that "a thermal asperity causes a DC offset," pointing to Figure 2A) in accordance with a data rate (identifying column 6, lines 51-56, for this teaching), comprising a detection circuit to detect a thermal asperity signal (identifying Figure 3, element 106, for this teaching), and a filter circuit to respond to the thermal asperity signal in accordance with the data rate (identifying Figure 3, element 112, and column 6, line 55, for such a teaching).

For the further limitations of instant claim 6, the examiner identifies Figures 1, 12, and 14 of Patti as teaching a disk

drive system for reading and writing information on a disk, comprising a head to read/write information on the disk, a preamplifier to amplify the information (identifying Figure 3, element 100 for this teaching), and a read channel to process the amplified information, wherein the read channel includes the offset correction circuit to correct DC offset in accordance with a data rate (identifying Figure 3, and "the remainder of 23" for such a teaching). See page 2 of the answer.

Appellants' arguments, in toto, comprises the following, at pages 5-6 of the brief:

...Patti does not disclose or suggest the presently claimed invention including a filter circuit to respond to the thermal asperity signal in accordance with the data rate.

The Examiner alleges that Patti discloses an offset correction circuit to correct DC offset in accordance with a data rate referring to Figure 3 element 102, Figure 2a, and column 6, lines 51-56.

Notwithstanding the allegations of the Examiner, Patti discloses at column 6, lines 51-56 that the programmed resistances of the variable resistance circuit 132 are selected to achieve the cutoff frequencies for the filter 112. The programmable thermal asperity recovery circuit 132 provides flexibility allowing utilization in read channels having potentially different or varying characteristics (citing different data rates, different causes for the thermal interference, etc.).

The resistance circuit 132 does not respond to data rates.

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Patti does not disclose a circuit to determine the data rate and consequently there is no way of adjusting the programmable thermal asperity recovery circuit based on different data rates.

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984), citing Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

We have reviewed the evidence of record, including the Patti reference and the arguments of appellants and the examiner. It is clear that Patti discloses an offset correction circuit to correct DC offset, wherein a detection circuit 106 in Figure 3 detects a thermal asperity signal, and a filter circuit 112 in Figure 3 is responsive to the thermal asperity signal. The question to be answered in order to decide this case, however, is whether Patti's filter circuit 112 responds to the thermal asperity signal "in accordance with said data rate," as claimed.

The examiner points us to column 6, line 55, of Patti, to support the allegation that Patti does disclose that the filter circuit responds to the thermal asperity signal "in accordance with said data rate." The cited portion of Patti recites that

The programmable thermal asperity recovery circuit 132... provides flexibility thereby allowing utilization in read channels having potentially different or varying characteristics (e.g., different data rates, different causes for the thermal interference, etc.).

Appellants argue that Patti's variable resistance circuit 132 chooses resistances to achieve cutoff frequencies for filter 112, but that circuit 132 does not respond to data rates. In fact, argue appellants, Patti does not disclose any circuit to determine a data rate and, consequently, there is no way of adjusting the programmable thermal asperity recovery circuit 102 based on different data rates, as required by the instant claims.

The examiner's response is that the claimed language, "in accordance with" is not synonymous with "in response to," and that anything that is "in conformity", or "in agreement," is "in accordance," as claimed. The examiner points out that in the instant invention, the offset correction circuit is in agreement with the data rate because the offset correction circuit is

responsive to a signal read at a data rate, and that appellants' argument that resistance circuit 132 "does not respond to" data rates (brief-page 6) is not drawn to claimed subject matter (answer-page 4).

We agree with the examiner. The instant claims do not require a response from the filter circuit based on any specific data rate, or that various data rates will cause a different response from the filter. The claims merely require that an offset correction circuit corrects DC offset "in accordance with a data rate" and that the filter circuit responds to a thermal asperity signal "in accordance with said data rate."

Whatever "data rate" at which Patti's system is operating, is the "data rate" in accordance with which the offset correction circuit of Patti is operating and in accordance with which the filter circuit 112 is responding to the thermal asperity signal. As the examiner indicates, appellants' argument are not commensurate with the scope of the claims since the claims do not require that the response from the filter be based on any specific data rate, or pluralities thereof.

We also agree with the examiner that Patti's disclosure, at column 6, line 55, viz. different data rates, shows that Patti's system is applicable and operable with other data rates.

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Therefore, the filter 112 is responsive to the thermal asperity signal "in accordance with said data rate" since the filter is responsive to the thermal asperity signal no matter what the actual data rate is in Patti and that is all the instant claim language requires.

Based on our discussion and interpretation of the instant claim language supra, there is no need for any circuit in Patti to determine a data rate, as argued by appellants. The programmable thermal asperity recovery circuit 102 need not be adjusted based on different data rates because the instant claims do not require such a data rate determining circuit or different data rates.

Accordingly, since we find that the examiner has presented a prima facie case of anticipation and that appellants have not successfully rebutted such prima facie case, the decision of the examiner rejecting claims 1-10 under 35 U.S.C. §102 (e) is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

Ernest L. Knobell

ERROL A. KRASS
Administrative Patent Judge

Joseph Ruggiero

JOSEPH F. RUGGIERO
Administrative Patent Judge

~~ROBERT E. NAPPI~~
Administrative

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TEXAS INSTRUMENTS INCORPORATED
P. O. BOX 655474, M/S 3999
DALLAS, TX 75265